

102-F5 18165

Math for Liberal Arts
Dr Matthew Sunderland

1. Synchronous lecture Monday 8:00–9:55 Wednesday 8:00–8:50
<https://zoom.us/meeting/register/tJUocu6trTsuHtA5anoJr5LEor8D1iMFQZZr>
2. Online problem sets due Sundays
https://www.math.csi.cuny.edu/webwork2/Math102_18165_Sunderland_F20/
Both username and password are your CUNY username,
eg, **username first.last00 password first.last00**, all lowercase (*not* jsmith5678)
3. Written assignments due some Sundays on
<https://www.gradescope.com> course code 9Z28GZ
4. Reading assignments due each night before lecture
Mathematical Excursions 4e by Aufmann, Lockwood, Nation, Clegg (Houghton Mifflin)
5. Office hours **[as of 10/13] every day 12–1 and 6–7**
<https://zoom.us/my/mattsunderland>
6. Announcements, Lecture Recordings, and Grades posted on
<https://bbhosted.cuny.edu>
7. Platform for administering exams TBD,
possibly Blackboard, Gradescope, WeBWorK, Respondus, or Proctortrack
8. **Tutoring available at**
<https://www.csi.cuny.edu/students/academic-assistance/tutoring>

Day 1 Homework

1. Download Zoom and create free account
2. Do Online Problem Set 1 by Sunday 8/30
3. Submit Written Assignment 1 by Sunday 8/30—see last two pages of syllabus
4. Do first reading assignment (Section 9.1) by Sunday 8/30
5. Do office hour survey <https://forms.gle/RRf74atLQkR3kg5DA>

$$\text{Course Grade} = \text{Average of} \left\{ \begin{array}{l} \text{Coursework} \\ \text{Exam 1} \\ \text{Exam 2} \\ \text{Final} \end{array} \right\} \left\{ \begin{array}{l} 1. \text{ Lecture participation} \\ 2. \text{ Online problem sets} \\ 3. \text{ Written assignments} \end{array} \right.$$

Lecture Recording Statement *Students who participate in this class with their camera on or use a profile image are agreeing to have their video or image recorded solely for the purpose of creating a record for students enrolled in the class to refer to, including those enrolled students who are unable to attend live. If you are unwilling to consent to have your profile or video image recorded, be sure to keep your camera off and do not use a profile image. Likewise, students who un-mute during class and participate orally are agreeing to have their voices recorded. If you are not willing to consent to have your voice recorded during class, you will need to keep your mute button activated and communicate exclusively using the “chat” feature, which allows students to type questions and comments live.*

Deadlines Add 9/1 Drop 9/15 Withdraw 11/6

Topics

Reading due - **Lecture date** - Problem set due

A. 9.1 (496–500) Linear equations 506/1,3,5,9,11,17,19,25 (<i>ungraded practice</i>)	- 8.26 - 8.30
B. 9.1 (500–503) Applications 507–8/42,43,47,48,51,52,57ab,59	8.30 - 8.31 - 9.6
C. 9.1 (503–504) Literal equations 508–9/69,71,73,75,77,79,88,89	8.30 - 8.31 - 9.6
D. 9.2 (509–514) Rates, ratios 518–20/8–10,14,17,18,21	9.1 - 9.2 - 9.20 9.27
E. 9.2 (514–517) Proportions 521/27–31,35,43,46–51	9.1 - 9.2 - 9.20 9.27
F. 9.3 (522–524) Percents 535/7–9,13,14,16	9.8 - 9.9 - 9.27
G. 9.3 (525–529) Percent problems 535–6/18,20,22	9.8 - 9.9 - 9.27
H. 9.3 (530–532) Percent increase/decrease 536/24,26–8	9.13 - 9.14 - 9.27
9. (549) Chapter Review 550–552/1,3,4,9,10,11,15,16,18,21,23,25,29	
I. 7.3 (376–381) Perimeter 389–90/7,9,11,17–9,22,23,25,29,31,33,35,36,39	9.20 - 9.21 - 10.4
J. 7.3 (381–386) Area 390/29,31,33,35,36,39	9.20 - 9.21 - 10.4
K. 7.5 (406–410) Volume 414/1–6,13–23odd	9.22 - 9.23 - 10.4
Exam Review http://www.math.csi.cuny.edu/Courses	
L. 12.1 (688–693) Counting principle 695/1–9odd,10,15–25odd,26	10.6 - 10.7 , 10.14 - 10.25
M. 12.2 (696–701) Factorial, permutation 705–6/3,5,6,13,15,45–8,54	10.18 - 10.19 - 11.1
N. 12.2 (702–703) Combination 705–6/21–9odd,37,39,43,49–51,56,65–70	10.18 - 10.19 - 11.1
O. 12.3 (707–711) Probability 715–7/1,3,7,9,13,23,24,27,31,35–47 odd	10.20 - 10.21 - 11.1
P. 12.3 (711–712) Application to genetics 716/53–56	10.25 - 10.26 - 11.8
Q. 12.3 (712–713) Calculating odds 717/59,60,67,69,71,74,77,79,80	10.25 - 10.26 - 11.8
R. 12.4 (718–723) And, Or, Not 725–6/3–11odd,21–33odd,32,39,40,43,45	10.27 - 10.28 - 11.8
12. Chapter Review 746–8/4,5,11–18,20–22,27–30,33,34,37–9,41–4,47,48,52,53	
S. 13.1 (752–754) Mean, median, mode 759/1,3,5,6,11,13,15	11.1 - 11.2 - 11.15
T. 13.1 (755–757) Weighted mean 759–61/17,19,21,23,27,29,31,33	11.1 - 11.2 - 11.15
U. 13.2 (762–767) Range, st. deviation, variance 769/1–5,7,9,13–16	11.3 - 11.4 - 11.15
V. 13.4 (781–783) Histograms 791/1,2	11.8 - 11.9 - 11.22
W. 13.4 (784–789) The normal 792/3,5–8	11.10 - 11.11 - 11.22
13. Chapter Review 808/1–3,6,7	
Exam Review http://www.math.csi.cuny.edu/Courses	
X. 11.1 (620–625) Interest 627–8/5,7,9,11,21,25,27,31,34,36,37,39,40,43–7	11.22 - 11.23 - 12.6
Y. 11.2 (628–640) Compound interest 642–3/1,3,5,7,15,18,27,31, 35,40,45,51–9odd,63–7	11.29 - 11.30 12.2 - 12.13
11. Chapter Review 683–4/1–12	

Mon		Tue		Wed		Thu		Fri	
8.31	B,C			8.26	A				
				9.2	D,E				
				9.9	F,G				
9.14	H			9.16	review				
9.21	I,J			9.23	K				
		9.29	review	9.30	review				
10.5	exam			10.7	L				
				10.14	L				
10.19	M,N			10.21	O				
10.26	P,Q			10.28	R				
11.2	S,T			11.4	U				
11.9	U,V			11.11	W				
11.16	review			11.18	exam				
11.23	X								
11.30	Y			12.2	Y				
12.7	review			12.9	review				

COLLEGE OF STATEN ISLAND
DEPARTMENT OF MATHEMATICS
COURSE OUTLINE
MTH 102 -- Mathematics for Liberal Arts

Fall 2017

TEXT: Mathematical Excursions 4th Edition by Aufmann/Lockwood/Nation/Clegg;

Houghton Mifflin Company

<http://www.math.csi.cuny.edu/Courses>

REQUIRED: Scientific Calculator

LESSON	SECTION	TOPICS	Optional ungraded extra practice problems from textbook
1,2,3	9.1 pp. 496-504	FIRST DEGREE EQUATIONS	
		Solving First-Degree Equations	P. 506/1,3,5,9,11,17,19,25
		Applications	Pp.507-508/42,43,47,48,51,52,57a,b,59
		Literal Equations	Pp. 508-509/69,71,73,75,77,79,88,89
4,5	9.2 pp. 509-517	RATE, RATIO & PROPORTION	
		Rates, ratios	Pp. 518-520/8,9,10,14,17,18,21, 27-31
		Proportions	P. 521/35,43,46-51
6,7,8	9.3 pp. 522-533	PERCENTS	
		Percents	P. 535/7,8,9,13,14,16
		Percent Problems: The Proportion Method, The Basic Percent Equation	Pp. 535-536/18,20,22
		Percent Increase and Decrease	P. 536/24,26,27,28
9*		REVIEW SESSION (Chapter 9)	Pp. 550-552/1,3,4,9,10,11,15,16, 18,21,23,25,29
10,11	7.3 pp. 376-387	PERIMETER & AREA of PLANE FIGURES	
		Perimeter of Plane Geometric Figures	Pp. 389-390/7,9,11,17,18,19,22,23,25,29,31,33, 35,36,39
		Areas of Plane Geometric Figures	P. 390/29,31,33,35,36,39
12	7.5 pp.406-412	Volume	P. 414/1-6,13-23 odd only
13,14*		REVIEW FOR TEST 1	http://www.math.csi.cuny.edu/Courses
15		TEST 1	
16,17	12.1 pp. 688-692	THE COUNTING PRINCIPLE	
		Counting by Making a List, Table, Tree Diagram The Counting Principle	P. 695/1,3,5,7,9,10,15,17,19,21,23,25, 26
18,19	12.2 pp. 696-703	PERMUTATIONS and COMBINATIONS	
		'n' Factorial, Permutation	Pp. 705-706/3,5,6,13,15,45-48,54
		Combination	Pp. 705-706/ 21,23,25,27,29,37,39,43,49,50,51,56, 65-70

LESSON	SECTION	TOPICS	Optional ungraded extra practice problems from textbook
20,21,22	12.3 pp. 707-714	PROBABILITY and ODDS Introduction to Probability Applications to Genetics Calculating Odds	Pp. 715-717/1,3,7,9,13,23,24,27,31,35-47 odd P. 716/53-56 P. 717/59,60,67,69,71,74,77,79,80
23	12.4 pp. 718-729	ADDITION and COMPLEMENT RULES Addition rules for Probabilities The Complement of an Event	Pp. 725-726/3,5,7,9,11,21,23,25,27,29,31,32,33,39,40,43,45
24*		REVIEW SESSION (Chapter 12)	Pp. 746-748/4,5,11-18,20-22,27-30,33,34,37-39,41-44,47,48,52,53
25,26	13.1 pp. 752-757	MEASURES of CENTRAL TENDENCY Mean, Median, Mode The Weighted Mean	P. 759/1,3,5,6,11,13,15 Pp. 759-761/17,19,21,23,27,29,31,33
27,28	13.2 pp. 762-767	MEASURES of DISPERSION The Range, The Standard Deviation, The Variance	P. 769/1-5,7,9,13-16
29,30	13.4 pp. 781-785	NORMAL DISTRIBUTIONS Frequency Distributions and Histograms Normal Distributions and the Empirical Rule	P. 791/1,2 P. 792/3,5,6,7,8
31,32*		REVIEW SESSION (Chapter 13) REVIEW for TEST 2	P. 808/1,2,3,6,7 http://www.math.csi.cuny.edu/Courses
33		TEST 2	
34,35	11.1 pp. 620-626	SIMPLE INTEREST Simple Interest, Future Value and Maturity Value	Pp. 627-628/5,7,9,11,21,25,27,31,34,36,37,39,40,43-47
36,37,38,39	11.2 pp. 628-640	COMPOUND INTEREST Compound Interest, Present Value, Inflation, Effective Interest Rate	Pp. 642-643/1,3,5,7,15,18,27,31,35,40,45,51,53,55,57,59,63-67
40*		REVIEW SESSION (Chapter 11)	Pp. 683-684/1-12
41-42*		REVIEW for FINAL	

*Indicates Review Sessions

Written Assignment 1

Name _____ EMPLID _____

Course _____ Date _____

Directions: Upload your completed assignment to Gradescope as a PDF. For full credit, each page of your submission must be right side up and the pages must be in the correct order. If Gradescope asks you to match questions to pages, do so. Many students find it easier to type/annotate directly onto the PDF on the computer; other students prefer to print out the assignment, handwrite their answers, and then use a scanning app to get the completed assignment back onto the computer. If you scan, make sure you scan as a single PDF (with two pages) and make sure you scan as a document, not a picture (completely white background between text).

Question 1.

Is this your first math course at CSI? If not, what math course did you take before this?

Question 2.

What suggestions do you have for students to get excited about learning online?

Question 3.

Are you taking this course to satisfy a requirement? Some other reason?

Question 4.

Is there some grade in this course that you will strive to make?